



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/740,080	12/18/2000	Michael Thomas Lee	P-8788	4542

7590

04/05/2002

GIRMA WOLDE-MICHAEL
Medtronic, Inc., MS 301
7000 Central Avenue NE
Minneapolis, MN 55432

EXAMINER

BRADFORD, RODERICK D

ART UNIT

PAPER NUMBER

3762

DATE MAILED: 04/05/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/740,080

Applicant(s)

LEE ET AL.

Examiner

Roderick Bradford

Art Unit

3762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Referring to claim 1, "data gathered" is unclear and should be changed to "data previously gathered. "To any patient" is inferentially included and needs to be positively recited. Also, "the results" lacks antecedent basis. In line 11 "via a network communication link" is vague since it is unclear whether this is the same communication link used in line 4 or another communication link. Also in line 11, "the appropriate IMD" is vague and should be changed to "said IMD" and "its firmware or software" is vague and should be changed to "said firmware or software".

Referring to claim 4, "an IMD" is vague and should be changed to "said IMD".

Referring to claim 12, "the system of claim 1" is vague since claim 1 is method. Therefore "system of claim 1" should be changed to "method of claim 1".

Referring to claim 13, "a centralized computing resource" is vague and should be changed to "said centralized computing resource". Also, "one or more IMDs" is vague and should be changed to "said one or more IMDs".

Art Unit: 3762

Claim 14 is unclear whether applicant is claiming the IMD and the data communication network. Also in claim 14, "said network" and "the network" are unclear as to which network is being referred to, is it the "information network" or "communication network". "Patient data" is inferentially included and needs to be positively recited, "recorded" is vague since there has not been a structure set forth for recording, and "an IMD" is vague and should be changed to "said IMD". "At least one IMD" is vague and should be changed to "said IMD".

Referring to claims 15-18, "computerized network of claim 13" is vague since claim 13 is a method. Therefore, "computerized network of claim 13" should be changed to "computerized network of claim 14".

Referring to claims 19 and 20, "the data communication" lacks antecedent basis.

Claim Rejections - 35 USC § 102/103

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 2, 12, and 13 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Nappholz et al. U.S. Patent No. 5,720,770.

Referring to claims 1, Nappholz discloses steps of:

- transporting via a network communication link data gathered from at least one IMD to a computing resource external to any patient (14)
- analyzing the physiologic data according to a suitable model (inherent)
- determining instructions of the IMD based on the results of the analysis of the physiological data (column 7, lines 59-62)
- transmitting via a network communication link the instructions for execution (14).

Referring to claim 2 wherein the network communication link comprises a radio frequency link (24).

Referring to claim 12, wherein one or more IMDs comprises one or more of a pacemaker (12).

Referring to claim 13, comprising further the steps of transmitting and upgrade to the IMD firmware or software (250).

It is inherent that a comparison is made to a model in order to determine how to change the parameters. In the alternative Nappholz discloses the claimed invention except for analyzing physiologic data according to a physiologic model. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the computerized method as taught by Nappholz, by analyzing physiologic

Art Unit: 3762

data according to a physiologic model since it is well known in the art to compare models to change parameters.

6. Claims 1-9 and 12-15 rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Thompson et al. U.S. Patent No. 6,083,248.

Referring to claims 1 and 14, Thompson states in column 15, lines 36-38 that data is transmitted back to the support network for analysis. Therefore, it is inherent that a comparison is made to a model in order to determine how to change the parameters.

In the alternative Thompson discloses the claimed invention except for analyzing physiologic data according to a physiologic model. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the computerized method as taught by Thompson, by analyzing physiologic data according to a physiologic model since it is well known in the art to compare models to change parameters.

Referring to claims 3-9 Nappholz fails to teach the methods of wherein the network communication link comprises a hybrid link, the hybrid communication comprising a radio frequency and a secondary link to a central computing resource, the secondary link is direct dial up connection, the secondary network link is an area network, the area network is a LAN, the area network is a WAN, and the area network is one of internet, intranet, extranet or world wide. However, Thompson teaches the methods of wherein:

- the network communication link comprises a hybrid link (column 5, lines 47-56) as means to better establish connection
- the hybrid communication comprising a radio frequency and a secondary link to a central computing resource (Fig 2) to have an alternate means to communicate with the central computer if one way happens to fail
- the secondary link is direct dial up connection (column 15, line 7) as an alternate means to communicate with the central computer
- the secondary network link is an area network (column 14, lines 55 and 56) as means to link computers together
- the area network is a LAN (column 14, line 56) as means to link computers together locally
- the area network is a WAN (column 1, lines 12 and 13) as a means to link computers together in various locations.
- the area network is one of internet, intranet, extranet or world wide (column 4, lines 64-67) as means of having various network systems.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teaching of Nappholz with the methods wherein the network communication link comprises a hybrid link as means to better establish connection, the hybrid communication comprising a radio frequency and a secondary link to a central computing resource to have an alternate means to communicate with the central computer if one way happens to fail, the secondary link is direct dial up connection as an alternate means to communicate with the central computer, the

secondary network link is an area network as means to link computers together, the area network is a LAN as means to link computers together locally, the area network is a WAN as a means to link computers together in various locations, and the area network is one of internet, intranet, extranet or world wide as means of having various network systems.

7. Claims 10 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson (or Nappholz) as applied to claims 4 and 14 above, and further in view of Varrichio et al. U.S. Patent No. 5,186,170.

Referring to claims 10 and 19, Thompson (or Nappholz) fails to teach a network communication link that is asynchronous. However, Varrichio teaches a network communication link that is asynchronous (column 1, line 60) as a means to allow communication of data one way at a time.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Thompson (or Nappholz) with a network communication link that is asynchronous, as taught by Varrichio, as a means to allow communication of data one way at a time.

8. Claims 11 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson (or Nappholz) as applied to claims 4 and 14 above, and further in view of Deschamp et al. U.S. Patent No. 5,899,931.

Referring to claims 11 and 20, Thompson (or Nappholz) fails to teach a network communication link that is synchronous. However, Deschamp teaches a network

Art Unit: 3762

communication link that is synchronous (column 2, lines 30-32) as a means to allow communication of data simultaneously.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Thompson (or Nappholz) with a network communication link that is synchronous, as taught by Deschamp, as a means to allow communication of data simultaneously.

9. Claim 16-18 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Nappholz et al. U.S. Patent No. 5,720,770.

Referring to claims 16-18, Thompson discloses the claimed invention except for the super computer, multi-processor workstation, and networked cluster of computers. It would have been an obvious matter of design choice to use a super computer, multi-processor and networked cluster of computers, since the applicant has not disclosed that a super computer, multi-processor or networked cluster of computers solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with any computer, such as the database as taught by Nappholz for processing and analyzing data.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roderick Bradford whose telephone number is (703) 305-3287. The examiner can normally be reached on Monday - Friday 7 a.m. - 4 p.m..

Art Unit: 3762

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on (703) 308-5181. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3590 for regular communications and (703) 305-3590 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.

R. Beadford 4/2/02

R.B.
April 2, 2002

u c
GEORGE R. EVANISKO
PRIMARY EXAMINER

4/2/2